

Title (en)

SCREW FASTENING SYSTEM AND SCREW FASTENING DEVICE

Title (de)

SCHRAUBENBEFESTIGUNGSSYSTEM UND SCHRAUBENBEFESTIGUNGSVORRICHTUNG

Title (fr)

SYSTÈME DE FIXATION DE VIS ET DISPOSITIF DE FIXATION DE VIS

Publication

EP 4008494 A1 20220608 (EN)

Application

EP 20850790 A 20200408

Priority

- JP 2019142934 A 20190802
- JP 2020015789 W 20200408

Abstract (en)

[Problem] To enable a screw fastening device to be easily used in combination with a robot as compared to conventional technologies.[Solution] A screw fastening device body 5, an attachment unit 6, and a sliding member 7 are provided in a second arm 4 that is a leading arm of the robot and has a leading end shaft 43 movable along the direction of an elevation axis L1. The screw fastening device body 5 includes a screw fastening driving means, a drive shaft 54 rotationally driven by the screw fastening driving means, and an extension bar 55 that is so connected to rotate together with the drive shaft 54 in the circumferential direction and to move in the axial direction. The attachment unit 6 fixedly connects the screw fastening driver to the second arm so that a screw fastening axis parallel to the elevation axis serves as a rotation axis of the screw fastening driving means. The sliding member 7 is connected to the leading end shaft 43 and supports the extension bar 55 so as to move together in the axial direction and rotate in the circumferential direction.

IPC 8 full level

B25J 9/06 (2006.01); **B23P 19/06** (2006.01)

CPC (source: EP US)

B23P 19/06 (2013.01 - EP US); **B25J 9/042** (2013.01 - EP); **B25J 9/1679** (2013.01 - EP); **B25J 11/00** (2013.01 - EP); **G05B 19/182** (2013.01 - US); **G05B 2219/39001** (2013.01 - US); **G05B 2219/40072** (2013.01 - EP); **G05B 2219/40301** (2013.01 - US); **G05B 2219/45091** (2013.01 - EP); **G05B 2219/45203** (2013.01 - US)

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

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DOCDB simple family (application)

EP 20850790 A 20200408; JP 2020015789 W 20200408; JP 2021537577 A 20200408; US 202017631925 A 20200408